

AMENDMENTS TO THE CLAIMS

1. (canceled)
2. (currently amended): The catalyst of claim ~~1~~ 31 wherein the Group IIa metal oxide comprises an oxide of a metal selected from the group consisting of magnesium, calcium, barium and strontium and mixtures thereof.
3. (original): The catalyst of claim 2 wherein the metal comprises strontium.
4. (currently amended): The catalyst of claim ~~1~~ 31 wherein the carrier comprises a refractive ceramic or metal monolith having a honeycomb structure.
5. (original): The catalyst of claim 4 wherein the ceramic monolith is selected from the group consisting of cordierite, cordierite-alpha alumina, silicon nitride, zircon mullite, spodumene, alumina-silica magnesia, zircon silicate, sillimanite, magnesium silicates, zircon petalite, alpha alumina and aluminosilicates.
6. (original): The catalyst of claim 4 wherein the ceramic monolith comprises cordierite.
7. (original): The catalyst of claim 4 wherein the metal monolith comprises stainless steel.
8. (currently amended): The catalyst of claim ~~1~~ 31 wherein the Group IIa metal oxide is dispersed on the carrier in a loading of about 0.005 to about 1.0 g/in³ of carrier.
9. (original): The catalyst of claim 8 wherein the Group IIa metal oxide is dispersed on the carrier in a loading of 0.1 to 0.6 g/in³ of carrier.

10. (currently amended): The catalyst of claim + 31 wherein the undercoat further comprises a lanthanum oxide.

11. (original): The catalyst of claim 10 wherein the lanthanum oxide is present in a loading of about 0.005 to about 1.0 g/in³ of carrier.

12. (original): The catalyst of claim 11 wherein the lanthanum oxide is present in a loading of 0.2 to 0.6 g/in³ of carrier.

13. (currently amended): The catalyst of claim + 31 wherein the top coat comprises a middle layer overlying the undercoat and an upper layer overlying the middle layer.

14. (currently amended): The catalyst of claim + 31 wherein the three-way conversion catalyst material comprises a platinum-group metal catalytic component.

15. (currently amended): The catalyst of claim + 31 wherein the platinum-group metal catalytic component is selected from the group consisting of platinum, palladium, rhodium and mixtures thereof.

16. (original): The catalyst of claim 15 wherein the platinum-group metal catalytic component comprises a mixture of platinum and rhodium.

17. (currently amended): The catalyst of claim 16 wherein the platinum and rhodium are present in the mixture in a molar ratio of about 0.2 to about 20 moles of platinum per mole of rhodium.

18. (original): The catalyst of claim 17 wherein the platinum and rhodium are present in the mixture in a molar ratio of 1 to 5 moles of platinum per mole of rhodium.

19. (original): The catalyst of claim 14 wherein the platinum-group metal catalytic component is present in a loading of about 10 to about 200 g/ft³ of carrier

20. (currently amended): The catalyst of claim ~~19~~ 19 wherein the platinum-group metal catalytic component is present in a loading of 20 to 100 g/ft³ of carrier.

21. (currently amended): The catalyst of claim ~~1~~ 31 wherein the three-way conversion catalyst material is dispersed on a refractory metal oxide support.

22. (original): The catalyst of claim 21 wherein the support comprises finely divided particles having a particle size above 10 to 15 micrometers and is present in an amount of about 0.1 to about 4.0 g/in³ of carrier.

23. (original): The catalyst of claim 21 wherein the support is selected from the group consisting of alumina, silica, titania, silica-alumina, alumina-silicates, aluminum-zirconium oxide, alumina-chromia, alumina-cerium oxide and mixtures thereof.

24. (original): The catalyst of claim 23 wherein the support comprises gamma alumina.

25. (original): The catalyst of claim 24 wherein the gamma alumina is doped with a rare earth component.

26. (original): The catalyst of claim 25 wherein the rare earth component is selected from the group consisting of lanthanum, neodymium and mixtures thereof.

27. (original): The catalyst of claim 26 wherein the rare earth component is present in an amount of 0.02 to about 0.5 g/in³ of carrier.

28. (currently amended): The catalyst of claim + 31 wherein the topcoat further comprises a binder.

29. (original): The catalyst of claim 28 wherein the binder comprises zirconia.

30. (original): The catalyst of claim 28 wherein the binder is present in an amount of about 0.02 to about 1.5 g/in³ of carrier.

31. (new): A layered hydrogen sulfide-suppressing catalyst comprising:

- (a) a carrier;
- (b) an underlayer consisting essentially of a Group IIa metal oxide disposed directly on the carrier; and
- (c) at least one topcoat discrete layer segregated from, and disposed on, the underlayer, said topcoat layer consisting essentially of at least one layer of a three-way conversion catalyst.